Title: Modular System for Distributed User Data Management

Author: Filip Pavliš,

Author's email: f.pavlis@gmail.com

Department: Department of Distributed and Dependable Systems

Supervisor: Mgr. Pavel Ježek, Department of Distributed and Dependable Systems

Abstract: The main objective of this project was to create a multiplatform modular system for distributed data management. The system supports both local and remote accessible data storage. Therefore a part of the solution is also a server for remote data access. System also provides parallel usage of a local and remote storage which guarantees that the storage is accessible also when connection to server is lost. In this case, system is capable to synchronize changes between the server and a client. A client can use multiple instances of his storage and our system is able to synchronize them through central server. The system provides abstraction over data model to separate plugin developers from its specific behavior. As practical preview of system usability was created an extension application called TuaLoca. The application will contain implementation of preview plugins and basic user interaction.

Keywords: Distributed Data Management, Modular system, Synchronization on the SQL Queries Level, Distributed Solution for Interface LINQ